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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
DEAN, RAYMOND S	

ART UNIT	PAPER NUMBER
2684	

DATE MAILED: 02/03/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/832,512	VALDIVIA ET AL.	
	Examiner	Art Unit	
	Raymond S Dean	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 4, 5 - 7, 11, 13 - 18, 22, 24 - 29, 33, 36 - 41, 45, 47 - 53, and 57* is/are rejected.

7)☒ Claim(s) *8 – 10, 12, 19 – 21, 23, 30 – 32, 34, 35, 42 – 44, 46, 54 – 56, and 58* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 – 4, 5, 7, 13 – 15, 17, 18, 24 – 26, 28, 29, 36 – 39, 41, 47 – 51 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay (US 2002/0147011 A1) in view of Jacobson et al. (US 6,381,250 B1).

Regarding Claim 1, Kay teaches a method of managing system capacity of a communication system, the method comprising: generating a predetermined profile of a terminal that is served by the communication system, the predetermined profile including service class information and rate information (Section 0035, the service class can be connection-oriented or connectionless-oriented); generating a capacity plan based upon the capacity resource configuration data and the predetermined profile (Section 0027, the bandwidth allocation is the capacity plan); and configuring a remote processor according to the capacity plan, the remote processor being configured to process bandwidth request messages from the terminal and to selectively allocate bandwidth to the terminal in response to the bandwidth request messages (Figure 1A, Figure 1B, Sections 0027, 0028, 0033).

Kay does not specifically teach the method of receiving and receiving system capacity resource configuration data that reflect capacity requirements of a service provider.

Jacobson teaches the method of receiving and receiving system capacity resource configuration data that reflect capacity requirements of a service provider (Column 8 lines 33 – 39).

Kay and Jacobson (Column 3 lines 6 – 9) both teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the method described above in Jacobson in the satellite network of Kay such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claims 2, 3, 7, and 11, Kay in view of Jacobson teaches all of the claimed limitations recited in Claim 1.

Regarding Claim 2, Kay further teaches controlling admission of the terminal into the communication system based, in part, on the ST profile (Section 0033, in order for the NOCC to determine if there is sufficient bandwidth to satisfy a bandwidth request by a terminal the NOCC must know the profile of the terminal thus this is an inherent characteristic).

Regarding Claim 3, Kay further teaches a predetermined profile of a terminal with said profile being based on a service level agreement (Section 0035, the users of the

satellite terminals are subscribers which implies that there is a service level agreement between the subscribers and service provider).

Kay does not specifically teach inputting information.

Jacobson teaches inputting information by service provider (Column 8 lines 33 – 39, there is an operator interface for inputting information by the owner of the network, which can be the service provider).

Kay and Jacobson (Column 3 lines 6 – 9) both teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the inputting method described above in Jacobson in the satellite network of Kay such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claim 4, Kay in view of Jacobson teaches all of the claimed limitations recited in Claim 3. Jacobson further teaches the system capacity resource configuration data in the step of receiving the system capacity resource configuration data is provided by the service provider through an operator interface (Column 8 lines 33 – 39).

Regarding Claim 5, Jacobson teaches all of the claimed limitations recited in Claim 4. Kay further teaches the predetermined profile in the step of receiving the system capacity resource configuration data specifies whether to permit the terminal to burst over a committed information rate (CIR) (Sections 0035 - 0036, the specific number of uplink slots required by the satellite terminal is the CIR).

Regarding Claim 7, Kay further teaches a system capacity that includes uplink capacity and downlink capacity of a satellite (Section 0033, NOCC keeps track of the total capacity).

Regarding Claim 13, Kay teaches a communication hub for managing system capacity of a communication system, comprising: generating a predetermined profile of a terminal that is served by the communication system (Section 0035, the service class can be connection-oriented or connectionless-oriented); and a computer system configured to generate a capacity plan based upon the capacity resource configuration data and the predetermined profile that includes service class information and rate information, wherein the computer system configures a remote processor according to the capacity plan, the remote processor being configured to process bandwidth request messages from the terminal and to selectively allocate bandwidth to the terminal in response to the bandwidth request messages (Figure 1A, Figure 1B, Sections 0027, 0028, 0033, the bandwidth allocation is the capacity plan).

Kay does not specifically teach an operator interface configured to receive system capacity resource configuration data that reflect capacity requirements of a service provider and a service provider interface using the receiving method.

Jacobson teaches an operator interface configured to receive system capacity resource configuration data that reflect capacity requirements of a service provider and a service provider interface using the receiving method (Column 8 lines 33 – 39, there is an operator interface for inputting information by the owner of the network, which can be

the service provider thus said interface can be a service provider and operator interface).

Kay and Jacobson (Column 3 lines 6 – 9) both teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the interface described above in Jacobson in the satellite network of Kay such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claims 14, 18, and 22, Kay in view of Jacobson teaches all of the claimed limitations recited in Claim 13.

Regarding Claim 14, Kay further teaches a predetermined profile of the terminal that is based upon a service level agreement between the service provider and an operator of the communication system (Section 0035, the users of the satellite terminals are subscribers which implies that there is a service level agreement between the subscribers and service provider, which can also be the operator).

Regarding Claim 15, Kay teaches all of the claimed limitations recited in Claim 14. Jacobson further teaches a database configured to store the predetermined profile and the system capacity resource configuration data corresponding to the service level agreement (Column 8 lines 29 – 39, a database is a software component thus the database can be the MC).

Regarding Claim 17, Jacobson teaches all of the claimed limitations recited in Claim 15. Kay further teaches the predetermined profile specifies whether to permit the

terminal to burst over a committed information rate (CIR) (Sections 0035 - 0036, the specific number of uplink slots required by the satellite terminal is the CIR).

Regarding Claim 18, Kay further teaches the system capacity includes uplink capacity and downlink capacity of the satellite, the computer system managing the uplink capacity and the downlink capacity by controlling admission of the terminal (Section 0033, NOCC keeps track of the total capacity).

Regarding Claim 24, Kay teaches a satellite communications system for providing communication services to a region, comprising: a terminal located within the region and configured to transmit and receive signals over a satellite having a payload that processes the signals, the terminal having a predetermined profile that includes service class information and rate information (Figure 1B, Section 0035, the service class can be connection-oriented or connectionless-oriented); and a hub that determines partitioning of system capacity over the region based upon the system capacity resource configuration data, the hub transmitting configuration information to the payload of the satellite according to the determined partitions, wherein the terminal is configured to transmit a bandwidth request message to the payload, the payload selectively allocating bandwidth in response to the request message based upon the configuration information (Figure 1A, Figure 1B, Sections 0027, 0028, 0033).

Kay does not specifically teach a hub configured to receive system capacity resource configuration data that reflect capacity requirements of a service provider.

Jacobson teaches a hub configured to receive system capacity resource configuration data that reflect capacity requirements of a service provider (Column 8 lines 33 – 39).

Kay and Jacobson (Column 3 lines 6 – 9) both teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the hub described above in Jacobson in the satellite network of Kay such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claims 25 – 29 and 33, Kay in view of Jacobson teaches all of the claimed limitations recited in Claim 24.

Regarding Claim 25, Kay further teaches the predetermined profile of the terminal is specified by a network service provider according to a service level agreement (Section 0035, the users of the satellite terminals are subscribers which implies that there is a service level agreement between the subscribers and service provider).

Regarding Claim 26, Jacobson further teaches a database resident within the hub and configured to store the predetermined profile, and the system capacity resource configuration data (Column 8 lines 29 – 39, a database is a software component thus the database can be the MC, there is an operator interface for inputting information by the owner of the network, which can be the service provider thus said interface can be a service provider and operator interface, which would allow for the storage of profiles).

Regarding Claim 28, Kay further teaches the predetermined profile specifies whether to permit the terminal to burst over a committed information rate (CIR) (Sections 0035 - 0036, the specific number of uplink slots required by the satellite terminal is the CIR).

Regarding Claim 29, Kay further teaches the system capacity includes uplink capacity and downlink capacity of the satellite, the hub being configured to manage the uplink capacity and the downlink capacity by controlling admission of the terminal (Section 0033, NOCC keeps track of the total capacity).

Regarding Claim 36, Kay teaches a satellite communications system for providing communication services, the system comprising: means for generating a predetermined profile of a terminal that is served by the communication system, the predetermined profile including service class information and rate information (Section 0035, the service class can be connection-oriented or connectionless-oriented); means for generating a capacity plan based upon the capacity resource configuration data and the predetermined profile; and means for configuring a remote processor according to the capacity plan, the remote processor being configured to process bandwidth request messages from the terminal and to selectively allocate bandwidth to the terminal in response to the bandwidth request messages (Figure 1A, Figure 1B, Sections 0027, 0028, 0033, bandwidth allocation is the capacity plan).

Kay does not specifically teach a means for receiving and a means for receiving system capacity resource configuration data that reflect capacity requirements of a service provider.

Jacobson teaches a means for receiving and a means for receiving system capacity resource configuration data that reflect capacity requirements of a service provider (Column 8 lines 33 – 39).

Kay and Jacobson (Column 3 lines 6 – 9) both teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the method described above in Jacobson in the satellite network of Kay such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claims 37 – 41 and 45, Kay in view of Jacobson teaches all of the claimed limitations recited in Claim 36.

Regarding Claim 37, Kay further teaches a means for controlling admission of the terminal into the communication system based, in part, on the ST profile (Section 0033, in order for the NOCC to determine if there is sufficient bandwidth to satisfy a bandwidth request by a terminal the NOCC must know the profile of the terminal thus this is an inherent characteristic).

Regarding Claim 38, Kay further teaches a predetermined profile of a terminal with said profile being based on a service level agreement (Section 0035, the users of the satellite terminals are subscribers which implies that there is a service level agreement between the subscribers and service provider).

Kay does not specifically teach means for inputting information.

Jacobson teaches means for inputting information by service provider (Column 8 lines 33 – 39, there is an operator interface for inputting information by the owner of the network, which can be the service provider).

Kay and Jacobson (Column 3 lines 6 – 9) both teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the inputting method described above in Jacobson in the satellite network of Kay such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claim 39, Kay further teaches a predetermined profile that specifies whether to permit the terminal to burst over a committed information rate (CIR) (Sections 0035 - 0036, the specific number of uplink slots required by the satellite terminal is the CIR).

Regarding Claim 41, Kay further teaches system capacity that includes uplink capacity and downlink capacity of a satellite (Section 0033, NOCC keeps track of the total capacity).

Regarding Claim 47, Kay teaches a computer-readable medium carrying one or more sequences of one or more instructions for managing system capacity of a communication system, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps (Figure 8, Sections 0067 - 0070) of: generating a predetermined profile of a terminal that is served by the communication system, the

predetermined profile including service class information and rate information (Section 0035, the service class can be connection-oriented or connectionless-oriented); generating a capacity plan based upon the capacity resource configuration data and the predetermined profile; and configuring a remote processor according to the capacity plan, the remote processor being configured to process bandwidth request messages from the terminal and to selectively allocate bandwidth to the terminal in response to the bandwidth request messages (Figure 1A, Figure 1B, Sections 0027, 0028, 0033, the bandwidth allocation is the capacity plan).

Kay does not specifically teach a receiving method and receiving system capacity resource configuration data that reflect capacity requirements of a service provider.

Jacobson teaches the method of receiving and receiving system capacity resource configuration data that reflect capacity requirements of a service provider (Column 8 lines 33 – 39).

Kay and Jacobson (Column 3 lines 6 – 9) both teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the method described above in Jacobson in the satellite network of Kay such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claims 48, 49, 53, and 57, Kay in view of Jacobson teaches all of the claimed limitations recited in Claim 47.

Regarding Claim 48, Kay further teaches controlling admission of the terminal into the communication system based, in part, on the ST profile (Section 0033, in order for the NOCC to determine if there is sufficient bandwidth to satisfy a bandwidth request by a terminal the NOCC must know the profile of the terminal thus this is an inherent characteristic).

Regarding Claim 49, Kay further teaches a predetermined profile of a terminal with said profile being based on a service level agreement (Section 0035, the users of the satellite terminals are subscribers which implies that there is a service level agreement between the subscribers and service provider).

Kay does not specifically teach inputting information.

Jacobson teaches inputting information by service provider (Column 8 lines 33 – 39, there is an operator interface for inputting information by the owner of the network, which can be the service provider).

Kay and Jacobson (Column 3 lines 6 – 9) both teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the inputting method described above in Jacobson in the satellite network of Kay such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claim 50, Kay in view of Jacobson teaches all of the claimed limitations recited in Claim 49. Jacobson further teaches the system capacity resource configuration data in the step of receiving the system capacity resource configuration

data is provided by the service provider through an operator interface (Column 8 lines 33 – 39).

Regarding Claim 51, Jacobson teaches all of the claimed limitations recited in Claim 50. Kay further teaches the predetermined profile in the step of receiving the system capacity resource configuration data specifies whether to permit the terminal to burst over a committed information rate (CIR) (Sections 0035 - 0036, the specific number of uplink slots required by the satellite terminal is the CIR).

Regarding Claim 53, Kay further teaches a system capacity that includes uplink capacity and downlink capacity of a satellite (Section 0033, NOCC keeps track of the total capacity).

3. Claims 6, 11, 16, 22, 27, 33, 40, 45, 52, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay (US 2002/0147011 A1) in view of Jacobson et al. (US 6,381,250 B1) an in further view of Heatwole et al. (US 2002/0021678 A1).

Regarding Claim 6, Jacobson teaches all of the claimed limitations recited in Claim 4.

Kay in view of Jacobson does not specifically teach said receiving system capacity resource configuration data being performed on an hourly basis.

Heatwole teaches system capacity resource configuration data being performed on an hourly basis (Section 0040).

Kay in view of Jacobson and Heatwole teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have

been obvious to one of ordinary skill in the art at the time the invention was made to use the hourly method described above in Heatwole in the satellite network of Kay in view of Jacobson such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claim 11, Kay in view of Jacobson does not teach initially partitioning the system capacity according to at least one of a uniform distribution and a distribution based upon population density.

Heatwole teaches initially partitioning the system capacity according to at least one of a uniform distribution and a distribution based upon population density (Figure 4, Sections 0042, 0044, the capacity is partitioned according to distributions or pools of satellite terminals).

Kay in view of Jacobson and Heatwole teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the partitioning method described above in Heatwole in the satellite network of Kay in view of Jacobson such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claim 16, Jacobson teaches all of the claimed limitations recited in Claim 15. Kay in view of Jacobson does not specifically teach the system capacity resource configuration data specified to occur on an hourly basis.

Heatwole teaches the system capacity resource configuration data specified to occur on an hourly basis (Section 0040).

Kay in view of Jacobson and Heatwole teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the hourly method described above in Heatwole in the satellite network of Kay in view of Jacobson such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claim 22, Kay in view of Jacobson does not teach initially partitioning the system capacity according to at least one of a uniform distribution and a distribution based upon population density.

Heatwole teaches initially partitioning the system capacity according to at least one of a uniform distribution and a distribution based upon population density (Figure 4, Sections 0042, 0044, the capacity is partitioned according to distributions or pools of satellite terminals).

Kay in view of Jacobson and Heatwole teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the partitioning method described above in Heatwole in the satellite network of Kay in view of Jacobson such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claim 27, Kay in view of Jacobson does not specifically teach the system capacity resource configuration data specified to occur on an hourly basis.

Heatwole teaches the system capacity resource configuration data specified to occur on an hourly basis (Section 0040).

Kay in view of Jacobson and Heatwole teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the hourly method described above in Heatwole in the satellite network of Kay in view of Jacobson such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claim 33, Kay in view of Jacobson does not teach initially partitioning the system capacity according to at least one of a uniform distribution and a distribution based upon population density.

Heatwole teaches initially partitioning the system capacity according to at least one of a uniform distribution and a distribution based upon population density (Figure 4, Sections 0042, 0044, the capacity is partitioned according to distributions or pools of satellite terminals).

Kay in view of Jacobson and Heatwole teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the partitioning method described above in Heatwole in the satellite network of Kay in view of Jacobson such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claim 40, Kay in view of Jacobson does not specifically teach the system capacity resource configuration data specified to occur on an hourly basis.

Heatwole teaches the system capacity resource configuration data specified to occur on an hourly basis (Section 0040).

Kay in view of Jacobson and Heatwole teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the hourly method described above in Heatwole in the satellite network of Kay in view of Jacobson such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claim 45, Kay in view of Jacobson does not teach initially partitioning the system capacity according to at least one of a uniform distribution and a distribution based upon population density.

Heatwole teaches initially partitioning the system capacity according to at least one of a uniform distribution and a distribution based upon population density (Figure 4, Sections 0042, 0044, the capacity is partitioned according to distributions or pools of satellite terminals).

Kay in view of Jacobson and Heatwole teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the partitioning method described above in Heatwole in the satellite network of Kay in

view of Jacobson such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claim 52, Jacobson teaches all of the claimed limitations recited in Claim 50. Kay in view of Jacobson does not specifically teach a selectively receiving step being performed on an hourly basis.

Heatwole teaches a selectively receiving step being performed on an hourly basis (Section 0040).

Kay in view of Jacobson and Heatwole teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the hourly method described above in Heatwole in the satellite network of Kay in view of Jacobson such that there is optimal efficient utilization of the system capacity of said satellite network.

Regarding Claim 57, Kay in view of Jacobson does not teach initially partitioning the system capacity according to at least one of a uniform distribution and a distribution based upon population density.

Heatwole teaches initially partitioning the system capacity according to at least one of a uniform distribution and a distribution based upon population density (Figure 4, Sections 0042, 0044, the capacity is partitioned according to distributions or pools of satellite terminals).

Kay in view of Jacobson and Heatwole teach a satellite network that manages the bandwidth such that there is an efficient use of said bandwidth thus it would have

been obvious to one of ordinary skill in the art at the time the invention was made to use the partitioning method described above in Heatwole in the satellite network of Kay in view of Jacobson such that there is optimal efficient utilization of the system capacity of said satellite network.

Allowable Subject Matter

4. Claims 8 – 10, 12, 19 – 21, 23, 30 – 32, 34, 35, 42 – 44, 46, 54 – 56, and 58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Regarding Claims 8, 19, 30, 42, and 54, Kay teaches service classes that include an on demand class and a connectionless class, however, the prior art of record fails show an uplink capacity that is categorized according to service classes that include a scheduled class, an on-demand class, a high priority connectionless class, and a low priority connectionless class, the downlink capacity being categorized according to transmission services that include a broadcast service, a multicast service, and a point-to-point service.

Regarding Claim 9, 20, 31, 43, and 55, Kay teaches system capacity resource configuration data that includes information relating to the uplink capacity and the downlink capacity, however, the prior art of record fails to specifically show system capacity resource configuration data that includes information relating to the service

classes of the uplink capacity and to the transmission services of the downlink capacity. Claim 9 depends Claim 8, Claim 20 depends on Claim 19, Claim 31 depends on Claim 30, Claim 43 depends on Claim 42, and Claim 55 depends on Claim 54 therefore examiner gives same reason as set forth above.

Regarding Claim 10, 21, 32, 44, and 56, Kay teaches a satellite comprising a plurality of demodulators configured to receive signals from the terminal (Section 0030), however, the prior art of record fails to specifically show the configuring step comprising: transmitting configuration information that specifies demodulator assignment and demodulator carrier rate associated with the uplink capacity, the uplink capacity being partitioned as increments corresponding to the plurality of demodulators.

Regarding Claim 12, 23, 34, 46, and 58, Heatwole teaches a shared capacity pool, however, the prior art of record fails to specifically show a partitioning of the system capacity based upon requirements of a plurality of network service providers.

Regarding Claim 35, Jacobson teaches a hub that has an operator interface for inputting capacity information and profile information, however, the prior art of record fails to specifically show a provisioning interface that permits a network service provider to supply the predetermined profile to the hub.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication should be directed to Raymond S. Dean at telephone number (703) 305-8998.

If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology center 2600 only)

Hand – delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377

Mark Coursan

Raymond Dean